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Report of the technical review of the first biennial report of Ukraine

Developed country Parties are requested, in accordance with decision 2/CP.17, to submit their first biennial report to the secretariat by 1 January 2014. This report presents the results of the technical review of the first biennial report of Ukraine conducted by an expert review team in accordance with the "Guidelines for the technical review of information reported under the Convention related to greenhouse gas inventories, biennial reports and national communications by Parties included in Annex I to the Convention".

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I. Introduction and summary

A. Introduction

1. For Ukraine, the Convention entered into force on 11 August 1997. Under the Convention, Ukraine made a commitment to reduce its greenhouse gas (GHG) emissions by 20.0 per cent by 2020 below the 1990 level.

2. This report covers the in-country technical review of the first biennial report (BR1)[1] of Ukraine, coordinated by the secretariat, in accordance with the "Guidelines for the technical review of information reported under the Convention related to greenhouse gas inventories, biennial reports and national communications by Parties included in Annex I to the Convention" (decision 23/CP.19).

3. The review took place from 26 October to 1 November 2014 in Kiev, Ukraine, and was conducted by the following team of nominated experts from the UNFCCC roster of experts: Ms. Medea Inashvili (Georgia), Ms. Aglaia Obrekht (Canada), Mr. Janis Rekis (Latvia) and Ms. Olga Vavilonskaya (Belarus). Ms. Inashvili and Ms. Obrekht were the lead reviewers. The review was coordinated by Mr. Javier Hanna (secretariat).

4. During the review, the expert review team (ERT) reviewed each section of the BR1.

5. In accordance with decision 23/CP.19, a draft version of this report was communicated to the Government of Ukraine, which made no comment on it.

B. Summary

6. The ERT conducted a technical review of the information reported in the BR1 of Ukraine according to the "UNFCCC biennial reporting guidelines for developed country Parties" (hereinafter referred to as the UNFCCC reporting guidelines on BRs).

7. During the review, Ukraine provided further relevant information, including clarification of Ukraine's economy-wide emission reduction target, additional detailed information regarding the policies and measures (PaMs) in place, clarification of inconsistencies between the information reported in the common tabular format (CTF) tables, the CTF tables included in the BR1 and the tables in the sixth national communication (NC6), and provision of support to developing country Parties.

1. Completeness and transparency of reporting

8. Gaps and issues related to the reported information identified by the ERT are presented in table 1 below.

2. Timeliness

9. The BR1 was submitted on 30 December 2013, before the deadline of 1 January 2014 mandated by decision 2/CP.17. The CTF tables were submitted on 30 December 2013.

[1] The biennial report submission comprises the text of the report and the common tabular format (CTF) tables. Both the text and the CTF tables have been subject to the technical review.

3. Adherence to the reporting guidelines

10. The information reported by Ukraine in its BR1 is mostly in adherence to the UNFCCC reporting guidelines on BRs as per decision 2/CP.17 (see table 1). Overall, the Ukraine's BR1 is mostly complete and mostly transparent. The ERT noted that the BR1 is lacking completeness and transparency, mainly owing to non-inclusion of textual background information on the data and information in the CTF tables provided, and owing to some missing CTF tables and reporting elements, as indicated in table 1 below.

Table 1

Summary of completeness and transparency issues of reported information in the first biennial report of Ukraine

Sections of the Ukraine report	*Completeness*	*Transparency*	*Reference to paragraphs*
Greenhouse gas emissions and trends	Mostly complete	Transparent	14
Assumptions, conditions and methodologies related to the attainment of the quantified economy-wide emission reduction target	Mostly complete	Mostly transparent	17
Progress in achievement of targets	Mostly complete	Partially transparent	20–21, 23
Projections	Complete	Transparent	
Provision of support to developing country Parties	NA	NA	NA

Abbreviation: NA = not applicable.

A list of recommendations pertaining to the completeness and transparency issues identified in this table is included in the chapter on conclusions.

II. Technical review of the reported information

11. Ukraine provided its BR1 as an annex to its NC6. Because there is considerable overlap in the information provided in the two documents, Ukraine chose to provide limited textual information in the BR1, reasoning that the textual information was provided in the NC6 for most cases; however, references to the sections in the NC6 where this information is reported are not included in the BR1. The ERT noted that as the second biennial report (BR2) will not be submitted together with a national communication (NC), more detailed and comprehensive contents will have to be provided in the BR2 to ensure its completeness and transparency in accordance with the UNFCCC reporting guidelines on BRs.

A. All greenhouse gas emissions and removals related to the quantified economy-wide emission reduction target

12. Ukraine has provided a summary of information on GHG emission trends for the period 1990–2011 in its BR1 and CTF table 1. This information is consistent with the 2013 national GHG inventory submission. During the review, the ERT took note of the 2014 annual submission (version 1.5). The relevant information therein is reflected in this report.

13. Total GHG emissions[1] excluding emissions and removals from land use, land-use change and forestry (LULUCF) decreased by 57.4 per cent between 1990 and 2012.

[1] In this report, the term "total GHG emissions" refers to the aggregated national GHG emissions expressed in terms of carbon dioxide equivalent excluding land use, land-use change and forestry, unless otherwise specified.

whereas total GHG emissions including net emissions or removals from LULUCF decreased by 57.1 per cent over the same period. Further information on the review of emissions and emission trends is provided in chapter II.A of the report of the technical review of the sixth national communication (FCCC/TRR.1/UKR).

14. The ERT noted that the BR1 did not provide textual information on GHG emissions and emission trends for the period 1990–2011 or references to the NC6 where this information can be found. The ERT also noted that the BR1 did not provide summary information on Ukraine's national inventory arrangements and on the changes to these national inventory arrangements since its last NC or references to the NC6 where this information can be found. The ERT recommends that Ukraine provide summary textual information on GHG emissions and trends, and national inventory arrangements and changes to these national inventory arrangements in its next biennial report (BR).

B. Assumptions, conditions and methodologies related to the attainment of the quantified economy-wide emission reduction target

15. In its BR1 and CTF tables 2, Ukraine mistakenly reported a description of its Kyoto Protocol target for the first commitment period and not the required description of its quantified economy-wide emission reduction target under the Convention, referred to henceforth as the target, including associated conditions and assumptions. During the review week, Ukraine provided corrected and updated information on its target, and after the review week, Ukraine officially informed the ERT on the revised information on its target in CTF table 2(a). According to this information, the target is 20.0 per cent below the 1990 (base year) level by 2020, covering all mandatory sectors and the emissions of carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_3), and using global warming potential (GWP) values from the Fourth Assessment Report (AR4)[1] of the Intergovernmental Panel on Climate Change (IPCC) to aggregate GHG emissions up to 2020. The base year for NF_3 has not yet been decided. Ukraine's target does not include emissions/removals from the LULUCF sector. Ukraine also informed that all currently available and future mechanisms under the Convention may be used to meet its target; however, the scale of their contribution has not yet been estimated. Ukraine does not intend to use other market-based mechanisms to achieve its 2020 target.

16. The BR1 does not provide textual information on assumptions, conditions and methodologies related to the attainment of the target required by the UNFCCC reporting guidelines on BRs.

17. The ERT recommends that Ukraine provide consistent and complete information on its target and provide textual information on assumptions, conditions and methodologies related to the attainment of the target in its next BR.

C. Progress made towards the achievement of the quantified economy-wide emission reduction target

18. In its BR1 and CTF tables 3 and 4, Ukraine reported information on its mitigation actions implemented and planned since its fifth NC to achieve its target. Ukraine also

[1] The quantified economy-wide emission reduction target by Ukraine is expressed using the GWP values from the AR4, while emission levels are assessed using the values from the IPCC Second Assessment Report as per the "Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part I: UNFCCC reporting guidelines on annual greenhouse gas inventories".

reported on the use of units from market-based mechanisms and LULUCF to achieve its target (see para. 15 above).

19. CTF table 3 includes information on only three mitigation actions, and the textual information provided in the BR1 on mitigation actions is limited and often of general nature (see para. 23 below). The ERT noted that the first column relating to estimation of mitigation impact (non-cumulative, in kilotonnes of carbon dioxide equivalent (kt CO_2 eq)) of CTF table 3 is blank, but that this information is included in the tables provided as part of the BR1 annexed to the NC6. The ERT also noted that the years for these estimates are not indicated in CTF table 3 or the BR1. The ERT further noted that CTF tables 4(a)I for 2011 and 2012 and 4(b) are reported without any values. For table 4(a)I, which contains information on the accounting approach for LULUCF (land-based approach), there are no footnotes or text explaining why information is not provided, while for table 4(b), a footnote explains that "Ukraine did not use flexible mechanisms of the Kyoto Protocol to reach quantified economy-wide emission reduction targets, as the results were clear in 2008 a priori".

20. The ERT recommends that Ukraine provide complete and structured textual information on progress made towards the achievement of its target, in particular, on its mitigation actions implemented or planned, and ensure the consistency of information provided in the BR and CTF tables in its next BR submission.

21. The ERT recommends that Ukraine improve completeness by reporting all relevant information in CTF tables 4, or by including clear textual information or footnotes to tables explaining why information has not been reported, in its next BR.

22. The ERT reviewed the reported information and provided its assessment of progress made towards achieving the target. The ERT noted that according to the 2014 annual submission, Ukraine's emissions excluding LULUCF in 2012 (402,665.95 kt CO_2 eq) decreased by 57.4 per cent compared to the 1990 level (944,352.64 kt CO_2 eq), and that in the 'with measures' scenario, the projected emissions (459,161.36 kt CO_2 eq) would be 51.4 per cent below the 1990 level by 2020. Under the 'with additional measures' scenario, the projected emissions (451,659.96 kt CO_2 eq) would be 52.2 per cent below the 1990 level by 2020. The ERT noted the progress made by Ukraine and noted that it likely will be able to meet its target for 2020.

1. Mitigation actions and their effects

23. Ukraine has provided in its BR1 limited information on its package of mitigation actions introduced to achieve its target. A detailed review of the reported information is provided in chapter II.B of the IDR/NC6. The information on mitigation actions provided in the BR1 is not organized by sector and by gas. Instead, the information on PaMs in the BR1 is clumped together under the following three general policies/programmes: projects under the green investment scheme (GIS); the sector energy efficiency and conservation programme; and the state target economic programme for energy efficiency and development of production of energy from renewable energy and sources and alternative fuels. No further disaggregation of these policies has been provided (i.e. no information on the individual PaMs in individual sectors or by gas). The ERT recommends that Ukraine present the PaMs in table 3 of the BR1 and in CTF table 3 at a more disaggregated level (i.e. at the level of each individual policy or measure with quantitative objectives), and provide estimates for each of the policies, or combined estimates of PaMs for each sector, if by policy is not possible.

24. Information regarding the PaMs provided in the BR1 is not consistent with that provided in the NC6. The NC6 lists a number of policies that have not been included in the

BR1, or if they were included, it is unclear under which of the three policies listed in paragraph 23 above. The BR1 provides a textual description of the legal framework and key PaMs, at least internally consistent with CTF table 3. During the review, some additional information on PaMs (including the ones that have been adopted since publication of the NC 6) was provided to the ERT to supplement the BR1, disaggregating some of the three major overarching policies into subpolicies and providing more information about specific PaMs, with estimates of the energy savings. However, no additional estimates on the GHG mitigation impacts were provided. The ERT encourages Ukraine to improve consistency between the NC, BR and CTF tables the next time the two documents are submitted together and provide the required information on the impacts on GHG emissions of each PaM or group of PaMs in its next BR submission.

25. The ERT noted that while the NC6 provides charts that compare different projections (which lack clarity on the emission reduction target), clear and descriptive information on the evaluation of the progress made towards the target of Ukraine has not been included in the BR1. The ERT encourages Ukraine to include an evaluation (both in the form of a description and in the form of a chart) of the progress made towards achieving its target in its next BR.

26. The link between the PaMs and the projections is not explained in either the BR1 or the NC 6. Theoretically, the difference in the projections between the 'without measures' and the 'with measures' scenarios should represent, to a large extent, the effect of PaMs, even though there are synergy effects and/or overlapping of the PaMs. The differences between the 'without measures' and 'with measures' scenarios could also be affected by other factors that are not related to GHG PaMs, such as the introduction of new technologies or behavioural, political and other factors, but these factors would have a very limited impact on the projections of Ukraine because the forecast in the 'with measures' and in the 'without measures' scenarios started in 2010, with only a two year period where these factors could play a significant role. The sum of estimates for the three PaMs (all targeting the energy sector), as reported in CTF table 3, accrues to 26,010 kt CO_2 eq in 2012 and 69,120 kt CO_2 eq in 2020, whereas the difference between the 'without measures' and 'with measures' scenarios amounts to 61,744 kt CO_2 eq (including LULUCF) or 50,404 kt CO_2 eq (excluding LULUCF), with the LULUCF sector contributing to the reduction in emissions of 11,340 kt CO_2 eq. The ERT noted that neither the NC6 nor the BR1 provide clear explanations on what policy or measure exists in the LULUCF sector that would contribute over 11,000 kt CO_2 eq of reductions. The ERT encourages Ukraine to include an explanation of the relationship between the PaMs, their emission reduction estimates and the projections in the 'with measures' and 'without measures' scenarios.

27. According to the projections in the 'with measures' scenario, Ukraine likely will be able to meet its target for 2020; even in the 'without measures' scenario, Ukraine would meet its target in 2020.

28. Table 2 provides a summary of the key mitigation actions implemented by Ukraine to achieve its target.

Table 2
Summary of information on mitigation actions reported by Ukraine

Sectors covered	*List of key mitigation actions*	*Estimate of mitigation impact (kt CO_2-eq)*[a]
Policy framework and cross-sectoral measures		
	Projects under the green investment scheme and joint implementation[b]	10 (in 2012) 120 (in 2020)
	Sector energy efficiency and conservation programme for the period to 2017	7 000 (in 2012) 39 000 (in 2020)
	State target economic programme for energy efficiency and development of production of energy from renewable energy sources and alternative fuels	19 000 (in 2012) 50 000 (in 2020)
	Poltava region programme	NE
	Multiple other regional programmes	NE
Energy		
Renewable energy	National action plan for renewable energy for the period up to 2020	NE
	Law 'On Fundamentals (Strategy) of the State Environmental Policy of Ukraine until 2020'	NE
	Law 'On Electric Power Industry': the 'green tariff' for renewable electricity projects	NE
	Tax and customs codes for Ukraine: reduction of land tax income tax for businesses in renewable energy	NE
Energy efficiency	Energy strategy of Ukraine until 2030	NE
	Law 'On Fundamentals (Strategy) of the State Environmental Policy of Ukraine until 2020'	NE
	National action plan 2020 for energy efficiency	NE
Industrial sectors	Environmental tax on CO_2 emissions: 1. UAH 0.22/t CO_2 (approximately EUR 0022) in 2011 2. UAH 0.26/t CO_2 (approximately EUR 0016) in 2014	NE
	Industry energy efficiency programme in agriculture	NE
	Industry energy efficiency programme for companies, institutions and establishments of the State Agency of the Forest Resources (Derzhlisahen-stvo)	NE
	Industry energy efficiency programme in the field of geology and exploration of mineral resources	NE
	Industry energy efficiency programme and energy conservation	NE
	Industry energy efficiency programme of the State Agency of Automobile Roads (Ukravtodor)	NE
Forestry	Law 'On Fundamentals (Strategy) of the State Environmental Policy of Ukraine until 2020'	NE
	Forestry development strategy	NE
	'Forests of Ukraine' programme	NE

Abbreviations: NE = not estimated; UAH = hryvnia.

[a] Estimates of mitigation impacts are only included in the first biennial report, and not in the sixth national communication.

[b] Estimates of mitigation impacts only include impacts from projects under the green investment scheme.

29. In its BR1, Ukraine provides information on domestic institutional arrangements, including institutional, legal, administrative and procedural arrangements used for domestic compliance, monitoring, reporting, archiving of information and evaluation of the progress towards its target.

30. Given the major political transformations that have happened in Ukraine in 2014, since the submission of the BR1, the legal, administrative and institutional framework for policymaking has changed. During the review, Ukraine provided additional information on the recent developments and changes. The changes relate to liquidation of the State Environmental Investment Agency in September 2014, which was the former main entity responsible for Convention and Kyoto Protocol reporting, arrangements and procedures, the transfer of its powers and functions to the Ministry of Ecology and Natural Resources of Ukraine and the legal changes at national and international levels affecting the politics and economies in the country, which mainly refer to the return to 2004 Constitution, signing of an Association Agreement between the European Union and Ukraine, and presidential and parliamentary elections that may entail further changes in the administrative and institutional framework. The additional information provided was complete and transparent. The ERT commends Ukraine for providing comprehensive information on institutional and legal arrangements in the country, including recent changes.

31. The ERT noted that the information in the NC6 referenced in the BR1 does not include a description of how Ukraine is monitoring and evaluating the progress of PaMs to mitigate GHG emissions over time. The ERT encourages Ukraine to provide this information in its next BR.

32. Ukraine has not provided detailed information on the assessment of the economic and social consequences of response measures. However, the ERT noted that in the addendum to its NC6, Ukraine reported additional information on how it strives to implement its commitments under Article 3, paragraph 1, of the Kyoto Protocol in such a way as to minimize adverse social, environmental and economic impacts on developing country Parties. The ERT encourages Ukraine to provide information on the assessment of the economic and social consequences of response measures in its next BR.

2. Estimates of emission reductions and removals and the use of units from the market-based mechanisms and land use, land-use change and forestry

33. Ukraine reported in its BR1 and CTF tables 4 on its plans to use market-based mechanisms under the Convention and other mechanisms and on the contribution from LULUCF. This information wrongly referred to the first commitment period of the Kyoto Protocol, and indicated that Ukraine did not plan to use market-based mechanisms under the Convention or other mechanisms to achieve its target. Ukraine also reported on its inclusion of the LULUCF contribution to the progress to its target in its BR1. During the review, Ukraine corrected this information and informed the ERT that its target does not include emissions/removals from the LULUCF sector and that all currently available and future mechanisms under the Convention may be used to meet the target; however, the scale of their contributions has not yet been estimated. In addition, Ukraine does not intend to use other market-based mechanisms to achieve its 2020 target. The ERT encourages Ukraine to provide clear and consistent information on its plans to use market-based mechanisms under the Convention and other mechanisms and on the contribution from LULUCF in its next BR. Table 3 illustrates how Ukraine reported on the use of units from market-based mechanisms and LULUCF to achieve its target.

Table 3

Summary information on the use of units from market-based mechanisms and land use, land-use change and forestry as part of the reporting on the progress made towards achievement of the target by Ukraine

Year	Emissions excluding LULUCF (kt CO2 eq)	LULUCF emissions reported[a] (kt CO2 eq)	Emissions including LULUCF (kt CO2 eq)	Use of units from the market-based mechanisms[a] (kt CO2 eq)
Base year (1990)	944 352.64	NA	NA	NA
2010	388 062.63	NA	NA	0
2011	400 518.00	NA	NA	0
2012	402 665.95	NA	NA	0

Source: Ukraine's 2014 GHG inventory submission, version 1.5.

Abbreviations: LULUCF = land use, land-use change and forestry; NA = not applicable.

[a] In common tabular format table 4, Ukraine reported a contribution from the land use, land-use change and forestry (LULUCF) sector of 37 955.08 kt carbon dioxide equivalent (CO_2 eq) in 2010 and 7 289.75 kt CO_2 eq in 2011 as part of information on progress towards the target. The expert review team (ERT) did not include these values in the table above as Ukraine, during the review, informed the ERT that its target does not include emissions/removals from LULUCF.

Ukraine, in common tabular format table 4, reported these values of units from the market-based mechanisms that it intends to use to achieve the target; however, during the review, it informed the ERT that all currently available and future mechanisms under the Convention may be used to meet the target, but that the scale of their contribution has not yet been estimated.

3. Projections

34. Ukraine has provided in its BR1 and CTF tables 6 comprehensive and well-organized information on its projections for 2020 and 2030. Projections are the same as in the NC6. A summary of key variables and assumptions used in the projections analysis is not reported in CTF table 5, which is completely missing in the BR1 and reported blank in the CTF tables; however, key assumptions are discussed in the textual part of the BR1, but they do not include any quantitative information. The ERT encourages Ukraine to provide a summary of key variables and assumptions used in the projections analysis in CTF table 5 in its next BR submission. A detailed review of the reported information is provided in chapter II.C of the IDR/NC6.

35. In its BR1, Ukraine did not provide information on the changes since the previous NC in the methodologies used for the preparation of projections. The ERT encourages Ukraine to improve transparency by including information on the changes of assumptions and values of variables used in its next BR.

36. The ERT noted the information reported by Ukraine on projected emission trends by 2020 and 2030. Overall, Ukraine's reported projections for 2020 and 2030 show an increasing emission trend. According to the reported information, in the 'with measures' and 'with additional measures' scenarios, the projected total emissions in 2020 are expected to be at levels that are 51.4 per cent and 52.2 per cent below the 1990 levels, respectively. The projected total emissions in 2030 under the 'with measures' and 'with additional measures' scenarios are expected to be at levels that are 42.6 and 44.9 per cent below the 1990 levels, respectively.

D. Provision of financial, technological and capacity-building support to developing country Parties

37. In its BR1, Ukraine reported some information on the provision of financial, technological and capacity-building support required under the Convention. The ERT commends Ukraine for reporting this information. The ERT noted that submitted CTF tables 7, 8 and 9 are blank. Ukraine, as a Party with an economy in transition included in Annex I to the Convention, but not included in Annex II, has no financial obligations pursuant to Article 4, paragraphs 3, 4 and 5, of the Convention. Therefore, Ukraine did not provide financial resources for developing country Parties, nor did it make any financial contributions to the Global Environment Facility, multilateral institutions and programmes nor bilateral and regional financial contributions related to the implementation of the Convention. However, in its BR1, Ukraine reported that during 1999–2009, it provided financial support to overcome the consequences of the extreme weather conditions, natural disasters and earthquakes in some developing countries.

38. During the review, the ERT was informed that Ukraine has an intention to establish a database of environmentally sound technologies and practices, taking into account the United Nations Economic Commission for Europe environmental indicators. A new resolution of the Cabinet of Ministers of Ukraine is being prepared in this regard. The database will be established and become available for national and international stakeholders, including developing country Parties, on a dedicated website within two to three years.

39. The ERT noted that in its addendum to the NC6, Ukraine included information on activities of Ukrainian companies relevant to the technology transfer of alternative energy resources and their use, for example, biofuels. These companies develop projects and construct biogas power stations in Indonesia, Lithuania, Republic of Moldova, Russian Federation, Slovakia and Turkey. During the review, Ukraine informed the ERT that it conducted various projects of installation of meteorological stations in Armenia, Belarus and Republic of Moldova, which were performed by Ukrainian engineers and had the objective of improving meteorological observations in these countries.

40. In the addendum to its NC6 and during the review, Ukraine informed the ERT on actions to support capacity-building of developing countries through education of students from these countries in Ukraine. Students from Armenia, Azerbaijan, China, Iraq, Kazakhstan, Kuwait, Republic of Moldova, Syrian Arab Republic and Turkmenistan have studied and graduated in climate-related courses at Ukrainian universities during the period 2010–2014. These courses have covered hydrometeorology and meteorology, climatology, ecology, energy efficiency and economics of natural resources.

III. Conclusions

41. The ERT conducted a technical review of the information reported in the BR1 and CTF tables of Ukraine in accordance with the UNFCCC reporting guidelines on BRs. The ERT concludes that the BR1 and CTF tables, together with the revised information provided during the review, provide a general overview of information on: emissions and removals related to the target, a description of the target, progress made by Ukraine to achieve its target and provision of support to developing country Parties. In its BR1, Ukraine mistakenly reported a description of its Kyoto Protocol target for the first commitment period. During the review week, Ukraine provided corrected and updated information on its target, and after the review week, Ukraine officially provided revised information on its target in CTF table 2(a). During the review, Ukraine also provided additional information on PaMs in place, clarification of inconsistencies between the

information reported in the CTF tables, the CTF tables included in the BR1 and the tables in the NC6 and provision of support to developing country Parties.

42. Ukraine's emissions and removals related to the target were estimated for 2012 to be 57.4 per cent below its 1990 level excluding LULUCF and 57.1 per cent below including LULUCF. Emission decreases were driven by the transition from a centrally planned economy to a market economy, which resulted in cardinal changes in all sectors of the economy. The more recent drop in emissions was driven by the global financial crisis.

43. The BR1 does not provide textual information on assumptions, conditions and methodologies related to the attainment of the target required by the UNFCCC reporting guidelines on BRs.

44. Under the Convention, Ukraine is committed to meeting a target of 20.0 per cent compared with the 1990 (base year) level by 2020. According to the revised information, the target covers all mandatory sectors and the emissions of CO_2, CH_4, N_2O, HFCs, PFCs, SF_6 and NF_3, and uses GWP values from the AR4 of the IPCC to aggregate GHG emissions up to 2020. The base year for NF_3 has not yet been decided.

45. In reporting on the progress made towards achieving its target, Ukraine provided limited information on its package of mitigation actions. CTF table 3 includes information on only three mitigation actions, and the textual information provided in the BR1 on mitigation actions is limited and often of general nature. The three general policies/programmes reported are: the projects under GIS; the sector energy efficiency and conservation programme; and the state target economic programme for energy efficiency and development of production of energy from renewable energy and sources and alternative fuels. No information on the individual PaMs in individual sectors, or by gas, has been provided. Information on PaMs provided in the BR1 is not consistent with that provided in the NC6. The NC6 lists a number of policies that have not been included in the BR1, or if they were included, it is unclear under which of the three general policies/programmes indicated above.

46. Ukraine made progress towards its target, and it likely will be able to meet its target for 2020. According to the 2014 annual submission, Ukraine's emissions excluding LULUCF in 2012 (402,665.95 kt CO_2 eq) decreased by 57.4 per cent compared to the 1990 level (944,352.64 kt CO_2 eq). Ukraine has provided emission projections for 'with measures', 'with additional measures' and 'without measures' scenarios for 2020 and 2030. According to this information, the projected emissions (459,161.36 kt CO_2 eq and 451,659.96 kt CO_2 eq) would be 51.4 and 52.2 per cent below the 1990 levels by 2020 in the 'with measures' and 'with additional measures' scenarios, respectively. Therefore, it is clear that Ukraine made progress towards its target and it likely will be able to meet its target for 2020. As informed by Ukraine, the target does not include emissions/removals from the LULUCF sector, and all currently available and future mechanisms under the Convention may be used to meet the target; however, the scale of their contribution has not yet been estimated. In addition, Ukraine does not intend to use other market-based mechanisms to achieve its 2020 target.

47. Ukraine, as a Party with an economy in transition included in Annex I to the Convention, but not included in Annex II, has no financial obligations pursuant to Article 4, paragraphs 3, 4 and 5, of the Convention. Nevertheless, in its BR1, complemented with the addendum to the NC6 and additional information provided during the review, Ukraine reported information on the provision of financial, technological and capacity-building support to developing countries required under the Convention.

48. In the course of the review, the ERT formulated several recommendations relating to the completeness and transparency of Ukraine's reporting under the Convention. The key recommendations[4] are that Ukraine:

(a) Improve the completeness of reporting by including in the next BR the following:

(i) Summary textual information on GHG emissions and trends, and national inventory arrangements and changes to the national inventory arrangements;

(ii) Consistent and complete information of its target, and textual information on assumptions, conditions and methodologies related to the attainment of the target;

(iii) All relevant information in CTF tables 4 or include clear textual information or footnotes to tables explaining why information has not been reported;

(b) Improve the transparency of reporting by including in the next BR the following:

(i) Complete and structured textual information on progress made towards the achievement of the target, in particular, on the mitigation actions implemented or planned, and consistent information provided in the BR and CTF tables;

(ii) Presentations of PaMs in table 3 of the BR1 and in CTF table 3 at a more disaggregated level (i.e. at the level of each individual policy or measure with quantitative objectives) and estimates for each of the policies, or combined estimates of PaMs for each sector, if by policy is not possible.

[4] The recommendations are given in full in the relevant sections of this report.

Annex

Documents and information used during the review

A. Reference documents

"UNFCCC biennial reporting guidelines for developed country Parties". Annex to decision 2/CP.17. Available at <http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf#page=4>.

"Guidelines for the technical review of information reported under the Convention related to greenhouse gas inventories, biennial reports and national communications by Parties included in Annex I to the Convention". Annex to decision 23/CP.19. Available at <http://unfccc.int/resource/docs/2013/cop19/eng/10a02.pdf#page=20>.

FCCC/ARR/2013/UKR. Report of the individual review of the annual submission of Ukraine submitted in 2013. Available at <http://unfccc.int/resource/docs/2014/arr/ukr.pdf>.

FCCC/IDR.5/UKR. Report of the in-depth review of the fifth national communication of Ukraine. Available at <http://unfccc.int/resource/docs/2011/idr/ukr05.pdf>.

Sixth national communication of Ukraine. Available at <http://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/6nc_v7_final_%5B1%5D.pdf>.

Addendum to the sixth national communication of Ukraine. Available at <http://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/addendium.pdf>.

First biennial report of Ukraine. Available at <http://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/uk_6nc_and_br1_2013_final_web-access%5B1%5D.pdf>.

Common tabular format tables of Ukraine. Available at <https://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/ukr_2014_v1.0_formatted1.pdf>.

2013 GHG inventory submission of Ukraine. Available at <http://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items/7883.php>.

2014 GHG inventory submission of Ukraine. Available at <http://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items/8108.php>.

B. Additional information provided by the Party

Responses to questions during the review were received from Mr. Yurii Nabyvanets (Ukrainian Hydrometeorological Institute), Ms. Vira Balabukh (Ukrainian Hydrometeorological Institute), Mr. Pavlo Kartashov (State Environmental Investment Agency), Ms. Iryna Trofimova (State Environmental Investment Agency), Mr. Roman Kharytonov (State Environmental Investment Agency), Mr. Borys Kostyukovskyy (Bureau of Complex Analysis and Projections) and Mr. Iurii Petruk (Innovative EcoSystems Solutions), including additional material on updated policies and measures, greenhouse gas

projections, the national registry and recent climate policy developments in Ukraine. The following documents were also provided by Ukraine:

V.M. Shestopalov, Academician of NASU; V.F. Loginov, Acad. NAS Belarus; V.L. Gnadchuy, NASU Corresponding Member, etc. 2011. *Global and Regional Climate Change*. Kyiv: Nika-Center.

Iryna Trofimova. 2014. Changes in domestic institutional arrangements.

Iryna Trofimova 2014. Recent developments of climate change policy.

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